

Work Order ID 99284

\*99284\*

Page 1

April-05-13 1:12:57 PM

Accept

\*N900040100\*

## **Setup Start**

\*NS1\*

**Item ID:** D3023-1

**Revision ID:**

**Item Name:** Back Panel

**Start Date:** 4/04/13      **Start Qty:** 1.00

\*1\*

**Cust Item ID:**

**Required Date:** 4/19/13      **Req'd Qty:** 1.00

\*1\*

**Customer:**

#### **Reference:**

Approvals:      Process Plan:      MLJ

Date: 15-04-08 Tooling:

Date:

## Run Start

\*NR1\*

QC:

Date:

Date:

QC:

Date:

Date:

\*NR2\*

\*NR2\*

NCR: Yes / No

DQA: Date:

## **WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____				DISPOSITION		AGAINST DEPARTMENT/PROCESS					
				Rework Scrap Use-as-is Work Order Update	Skid-tube Machining Thermoforming Large Fab	Crosstube Small Fab Finishing Composite	Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier	Engineering Quality Other			
Part No. _____											
NCR No. _____											
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear				General							
Bending	Bend	Grain	Ovalized	Pressure/Forced							
Centre Not Concentric to O/S	BOM/Route	Hardware	Over/Under tolerance	Temperature/Cure							
Cracks	Broken/Damaged	Inspection Incomplete	Part Incorrect	Weld							
Crushed/Crimped.	Burrs	Instructions Incomplete/Unclear	Part Lost/Missing	Wrong Stock Pulled							
Cuffs	Contamination	Maintenance	Part Moved								
Heat Treat	Countersink	Mislabeled	Positioned Wrong								
Inspection Strip in Tube	Cut Too Short	Misread	Power Loss/Surge								
Ripples in Bend	Drill Holes	Offset									
Torque Waves in Extrusion	Drawing	Out of Calibration									
Turning Sequence	Finish	Out of Sequence									
Wave/Twist in Tube	Folio	Outside Dimensions									

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Item ID: D3023-1

Accept

**\*N900040100\***

Setup

Start

**\*NS1\***

Revision ID:

Item Name: Back Panel

Stop

**\*NS2\***Start Date: 4/04/13 Start Qty: 1.00 **\*1\***

Cust Item ID:

Required Date: 4/19/13 Req'd Qty: 1.00 **\*1\***

Customer:

Reference:

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	<b>*NR1*</b>
	QC:	Date:	SPC (Y/N):	Date:	Stop		<b>*NR2*</b>

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 <b>*120*</b> QC	QC8- Inspect parts - second check Quality Control	0.00 0.00	S13/07/02	(H)					
130 <b>*130*</b> Brake NC Brake NC	Form as per dwg Memo	0.00							SB 13/07/18
140 <b>*140*</b> QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00	QAS 13/07/18	J					

NCR: Yes / No

DQA: Date:

## **WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS									
			Rework Scrap Use-as-is Work Order Update	Skid-tube Machining Thermoforming Large Fab	Crosstube Small Fab Finishing Composite	Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier	Engineering Quality Other								
Part No. _____															
NCR No. _____															
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector						
Doc/Data															
Equip/Tooling															
Operator															
Material															
Setup															
Other															
Process															
Supplier															
Training															
Unapproved															
FAULT CATEGORY															
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio		<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions				<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled			
														<input type="checkbox"/> Other	

**Work Order ID 99284****\*99284\***

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Item ID: D3023-1

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Item Name: Back Panel

Stop

**\*NS2\***Start Date: 4/04/13 Start Qty: 1.00 **\*1\***

Cust Item ID:

Required Date: 4/19/13 Req'd Qty: 1.00 **\*1\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

180

Identify as per dwg &amp; Stock Location:

*WIP 001*

0.00

*1 62 13-7-18***\*180\***

Packaging

Packaging

Memo

0.00

190

QC21- Final Inspection - Work Order Release

0.00

*MUJ 13-07-19***\*190\***

QC

Quality Control

Memo

0.00

*RJ B 01-18*

NCR: Yes / No

DQA: Date:

## **WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: Date:

Work Order: _____				DISPOSITION		AGAINST DEPARTMENT/PROCESS					
				Rework Scrap Use-as-is Work Order Update	Skid-tube Machining Thermoforming Large Fab	Crosstube Small Fab Finishing Composite	Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier	Engineering Quality Other			
Part No. _____  NCR No. _____											
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear				General							
Bending	General			Bend	Grain	Ovalized	Pressure/Forced				
Centre Not Concentric to O/S				BOM/Route	Hardware	Over/Under tolerance	Temperature/Cure				
Cracks				Broken/Damaged	Inspection Incomplete	Part Incorrect	Weld				
Crushed/Crimped.				Burrs	Instructions Incomplete/Unclear	Part Lost/Missing	Wrong Stock Pulled				
Cuffs				Contamination	Maintenance	Part Moved					
Heat Treat				Countersink	Mislabeled	Positioned Wrong					
Inspection Strip in Tube				Cut Too Short	Misread	Power Loss/Surge					
Ripples in Bend				Drill Holes	Offset						
Torque Waves in Extrusion				Drawing	Out of Calibration						
Turning Sequence				Finish	Out of Sequence						
Wave/Twist in Tube				Folio	Outside Dimensions						

# Picklist Print

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Work Order ID: 99284

Parent Item: D3023-1

Parent Item Name: Back Panel

Start Date: 4/04/13

Required Date: 4/19/13

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP C02.01.23Revised NG  
IPP Rev:D 08-04-16 now water jet DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M2024T3S.032		Purchased	No			100	sf	639.6522	2.8777	20291579			
2024-T3 .032 sheet										3-S		JM13-07-02	

Location	Loc Qty	Loc Code
MAT022	639.6522	
118243	32.4962	
118523	141	
121309	68.656	
123096	27.6	
123574	81.9	
124987	288	
		124987

NCR: Yes / No

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS							
			Rework Scrap Use-as-is Work Order Update	Skid-tube Machining Thermoforming Large Fab	Crosstube Small Fab Finishing Composite	Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier	Engineering Quality Other						
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Operator													
Material													
Setup													
Other													
Process													
Supplier													
Training													
Unapproved													
FAULT CATEGORY													
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions						<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <hr/> <hr/> <hr/>			
										<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled  <hr/> <hr/> <hr/>			
										<input type="checkbox"/> Other			

DART AEROSPACE LTD	Work Order:	99284
Description: Back Panel	Part Number:	D3023-1
Inspection Dwg: D3023	Rev: A	Page 1 of 1

# FIRST ARTICLE INSPECTION CHECKLIST

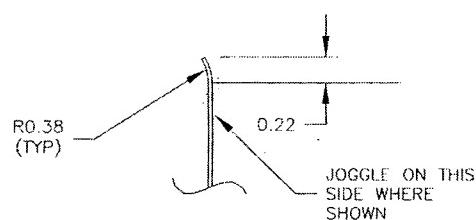
## X First Article      Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.128	+0.005/-0.001	0.129	✓		✓	JLemos
Ø0.191	+0.005/-0.001	0.193"	—		✓	
1.660	+/-0.010	1.663"	—		✓	
0.375	+/-0.010	0.378"	—		✓	
1.340	+/-0.010	1.345"	—		✓	
2.375	+/-0.010	2.375"	—		✓	
0.375	+/-0.010	0.376"	—		✓	
25.28	+/-0.030	25.28"	—		✗	JLemos
27.03	+/-0.030	27.03"	—		✗	
28.10	+/-0.030	28.10"	—		✗	
1.30	+/-0.030	1.30"	—		✓	
2.375	+/-0.010	2.375"	—		✓	
8.711	+/-0.010	8.711"	—		✓	Production
5.597	+/-0.010	5.597"	—		✓	
8.57	+/-0.030	8.57"	—		✓	
1.970	+/-0.010	1.973"	—		✓	
7.42	+/-0.030	7.42"	—		✓	
10.92	+/-0.030	10.92"	—		✓	
14.75	+/-0.030	14.75"			✗	

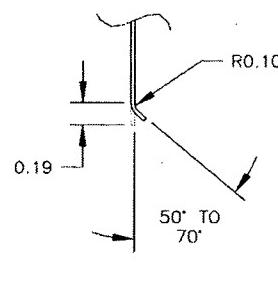
Measured by:	Jr	Audited by:	S	Prototype Approval:	N/A
Date:	13-07-02	Date:	13/07/02	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	08.11.27	New Issue	KJ/EC	

SECTION A-A  
SCALE 1:1  
(TYPICAL, EXCEPT WHERE SHOWN)



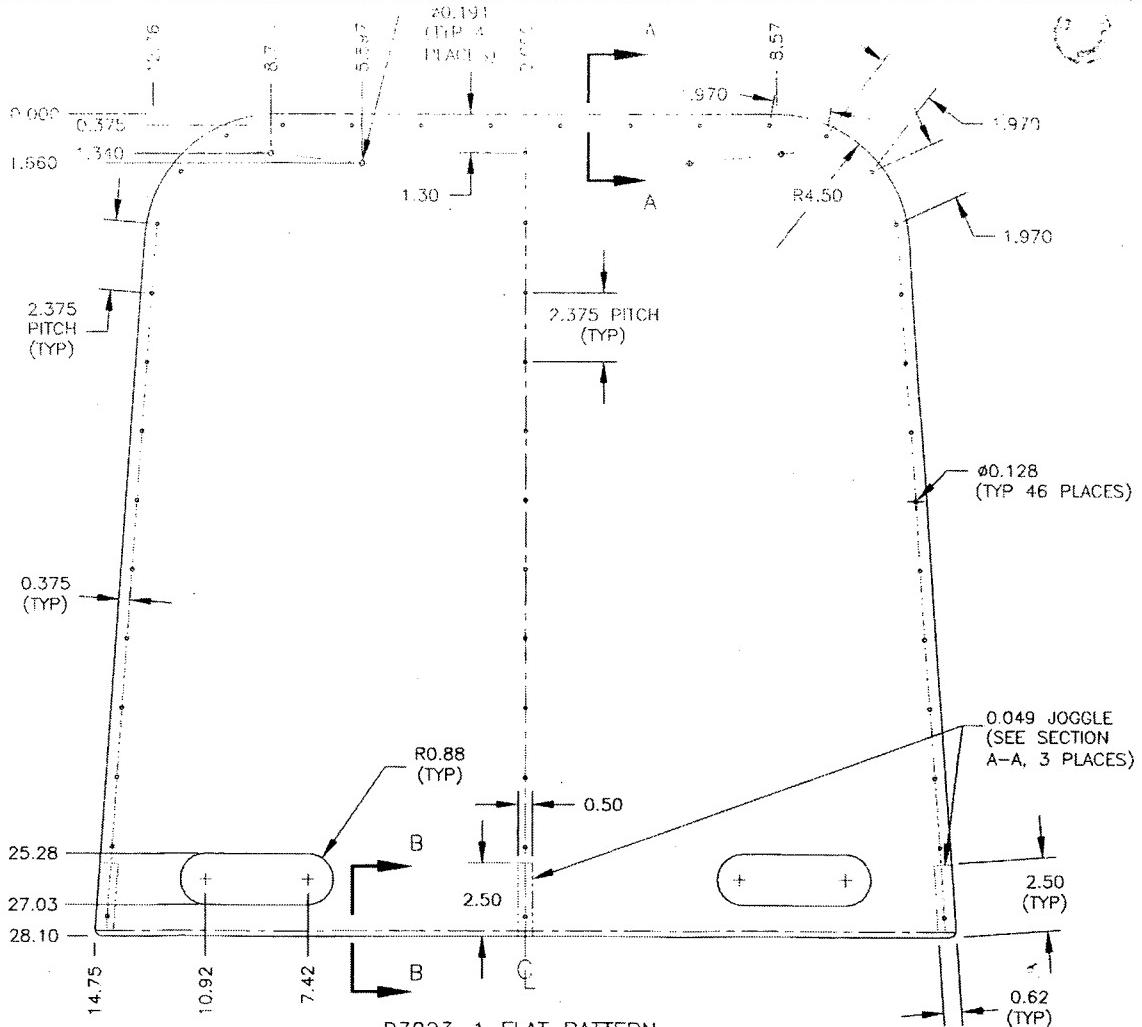
SECTION B-B  
SCALE 1:1  
(BOTTOM EDGE ONLY)



D3023-1 BEND DETAIL

D3023-1 BACK PANEL

- 1) MATERIAL: 2024-T3 (QO-A-250/4) 0.032 THICK
- 2) FINISH: ACID ETCH & ALODINE PER DART QSI 005 4.1  
POWDER COAT GREY SANTEX (REF 4.3.5.6) PER DART QSI 005 4.3
- 3) ALL DIMENSIONS ARE IN INCHES.
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.



RELEASED  
01.05.18

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DART AEROSPACE LTD.

A	01.05.18	NEW ISSUE	DART AEROSPACE LTD. HAWKESBURY, ONTARIO, CANADA
DESIGN	S	DRAWN BY	DART
CHECKED		APPROVED	DRAWING NO.
DATE	01.05.18	TITLE	BACK PANEL

Q

99284 MCJ  
13-04-08